

M E M O R A N D U M

TO: DIVISION OF WATER POLLUTION CONTROL - FIELD OPERATIONS SECTION

FROM: Larry L. Bishop - Region V (Marion)

SUBJECT: PERRY COUNTY -- Fidelity Mine #11
United Electric Coal Companies
Water Pollution (Mine Waste)

DATE: March 15, 1974

RECEIVED
Field Operations Section

MAR 29 1974

Environmental Protection Agency
State of Illinois

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The purpose of this visit was to become familiar with the mining operation of the Fidelity Mine #11. This was my first investigation at this mine site. During the visit, I was accompanied by Mr. Paul Seastrom, who is Supervisor for the reclamation work for the coal company. During this inspection, there was a heavy rainfall. Some portions of the mine were not accessible due to wet weather conditions. Drainage from the Fidelity Mine #11 is to Buckley Creek, tributary to the Big Muddy River.

We first made an inspection of the alternate gob disposal site. This site is located in the old mine workings, approximately one-half mile east of the preparation plant. A moderate amount of gob has been disposed of at this site. There has been no final cover applied to any of the refuse on this date. The main refuse disposal site is located in the active pit.

We then drove to the tipple area and made an inspection of the water circuit. The present slurry pond is an abandoned pit. There is no discharge from this pit at this time. According to reports, much of the water is still seeping through the bottom of the pit, since it has not become sealed. Eventually the refuse water will be pumped into another pit, which discharges to the fresh water lake used at the preparation plant. There is to be no discharge from this water circuit to natural drainage.

We then drove around the mine site to check some of the various sampling points, as listed on their permit. On this date, due to the heavy rainfall, these streams were in a flooded condition. There were no unusual observations at these sampling points.

Mr. Seastrom and I then drove around the active and abandoned portions of the mine and observed various conditions that existed at the mine. It was pointed out to the writer at one point where the wheel had started operation. On one side, where only the shovel was used, a large amount of rocks was observed in the final reclaimed land. In the area the wheel was put into service, the land contained what appeared to be a good dirt surface. The writer questioned Mr. Seastrom on the possible improvement of the reclamation work. Dirt from the wheel is piled directly onto the rock spoil for covering. This results in mounds of rock covered by mounds of dirt. In the final reclamation process, these areas are leveled off. This may result in one area receiving up to 30' of good soil, while the other contains a far less soil



covering to the rock. The possibility of first leveling the rock as the mining operation progressed was discussed with Mr. Seastrom. This would allow a uniform soil cover of possibly up to 15'. Mr. Seastrom stated that leveling of the rock spoils before covering with dirt would not be feasible, since some of the rock would fall back into the active pit and would have to be removed before the coal could be taken out. This would result in double handling in some instances.

Mr. Seastrom then reported that the coal company was sampling drainage from the Burning Star Mine #2, owned by Consolidation Coal Company. He indicated that this was being done to assure that they are not accused of any polluttional drainages originating from the other mine sites. During the investigation, Mr. Seastrom indicated that the mine has approximately 15 years left.

The writer informed Mr. Seastrom that he would be making a return visit in the near future to walk the drainage course of the mine so that a more comprehensive understanding can be obtained. This visit will be made during a period of more acceptable weather conditions.

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